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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,175	12/20/2001	Neal G. Skinner	2001-IP-004268	9457

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EXAMINER

WAKS, JOSEPH

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,175

Applicant(s)

SKINNER ET AL.

Examiner

Joseph Waks

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-22, 24, 26-29, 31-39 and 41-52 is/are rejected.
- 7) ☒ Claim(s) 9-12, 23, 25, 30 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0403.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1 and 44** are rejected under 35 U.S.C. 102(b) as being anticipated by **Russel et al.** (US 3,970,877).

Russel discloses invention as claimed: a structure 11 which displaces in response to a change in well pressure, and an electric generator 10 which generates electricity in response to displacement of the structure 11.

The displacement of the structure 11 is in response to the pressure change created by flow of mud through an orifice created between the structure and the well. Therefore, the generation of electricity in response to the change in well pressure is inherent to the disclosed structure.

Re claim 44, **Russel et al.** disclose the system as claimed. Claim 44 that merely recites connecting and using the disclosed features together is inherent to the disclosed structure.

3. **Claims 1 and 44** are also rejected under 35 U.S.C. 102(b) as being anticipated by **Kamp** (US 4,491,738).

Kamp discloses invention as claimed: a structure 47, 48 which displaces in response to a change in well pressure, and an electric generator 36 which generates electricity in response to displacement of the structure responding to the change in well pressure.

Re claim 44, **Kamp** discloses the system as claimed. Claim 44 that merely recites connecting and using the disclosed features together is inherent to the disclosed structure.

4. **Claims 1, 2, 6-8, 13, 21, 22, 24, 26-28, 31-39, 42, and 44-50** are rejected under 35 U.S.C. 102(b) as being anticipated by **Schultz et al. (US 5,362,984)**.

Schultz et al. disclose invention as claimed: a piston 150 which displaces in response to a change in well pressure, and an electric generator 118 which generates electricity in response to displacement of the structure responding to the change in well pressure.

Re claim 13, the mechanical linkage between the piston 150 and the generator 118 is disclosed in the form of the hydraulic motor 144 and the shaft 146.

Re claims 31-39, 42 and 44-50, **Schultz et al.** disclose the system as claimed. Claims 31-39 42 and 44 that merely recite connecting and using the disclosed features together are inherent to the disclosed structure.

5. **Claims 1-6, 13 and 44** are rejected under 35 U.S.C. 102(b) as being anticipated by **Skinner et al. (US 5,965,964)**.

Skinner et al. disclose invention as claimed: a piston 48 which displaces in response to a change in well pressure, and an electric generator 38 which generates electricity in response to displacement of the structure responding to the increase and decrease of well pressure.

Re claim 13, the mechanical linkage between the piston 48 and the generator 34 is disclosed in the form of the magnets attached to the piston.

Re claim 44, **Skinner et al.** disclose the system as claimed. Claim 44 that merely recites connecting and using the disclosed features together is inherent to the disclosed structure.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 14-20, 29, 41, 51 and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Schultz et al. (US 5,362,984)** in view of **Braun (US 3,610,216)**.

Schultz et al. discloses the system essentially as claimed. However, **Schultz et al.** do not disclose the mechanical linkage in a form of rack and pinion mechanism.

Braun discloses the mechanical linkage in a form of rack and pinion mechanism 13 connecting the piston 1 to the generator 151 for reciprocal movement for the purpose of synchronizing and balancing of the movement to achieve identical shape electrical waves produced by the generator during rightward and leftward stroke of the armature or magnet.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the system as taught by **Schultz et al.** and to provide the rack and

pinion mechanism as taught by **Braun** for the purpose of synchronizing and balancing of the movement to achieve identical shape electrical waves produced by the generator during rightward and leftward stroke of the armature or magnet.

Re claims 41, 51, and 52, the combined system discloses the invention as claimed. Claims 41 51 and 52 that merely recite connecting and using the disclosed features together are inherent to the disclosed structure.

Allowable Subject Matter

8. **Claims 9-12, 23, 25, 30 and 40** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The feature of the piston displacing the fluid through a hydraulic circuit in a first direction when the annulus pressure increases and the piston displacing the fluid through the hydraulic circuit in a second direction opposite to the first direction when the annulus pressure decreases, in combination with the other limitations present, are neither disclosed nor taught by the prior art of record.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (703) 308-1676. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R Ramirez can be reached on (703) 308-1371. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.


JOSEPH WAKS
PRIMARY PATENT EXAMINER
TC-2800

JW
April 19, 2003